#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023982 Address: 333 Burma Road **Date Inspected:** 03-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Components

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

## **WELDING**

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

This QA Inspector observed ZPMC qualified welding personnel identified as 066695 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam weld at panel point PP128.3 of OBG Segment 14W. Weld joint is identified as SEG3020D-038. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 037932 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AH-003. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform repair welding by

## WELDING INSPECTION REPORT

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Shielded Metal Arc Welding (SMAW), on Anchor plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AQ-025. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per Critical Welding Repair Report B-CWR2923 R1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037478 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck plate to Edge plate weld of OBG Segment 14W. Weld joint is identified as SEG3020-013, 014. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per welding repair report B-WR20776.

This QA Inspector observed ZPMC qualified welding personnel identified as 067588 perform welding by Shielded Metal Arc Welding (SMAW), on Corner Assembly Edge Plate I Rib stiffener to I Rib stiffener weld between panel points PP123 and PP123.5 of OBG Segment 13CW. Weld joint is identified as CA3016A-107, 111, 115, 119, 123. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 066179 perform welding by Shielded Metal Arc Welding (SMAW), on Corner Assembly Edge Plate I Rib stiffener to I Rib stiffener weld between panel points PP124 and PP124.5 of OBG Segment 13CW. Weld joint is identified as CA3016A-127, 131, 135, 139, 143. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified NDT personnel perform Magnetic particle testing on Deck panel diaphragm to Floor beam flange weld at panel point 121 of OBG Segment 13BW. Weld joint is identified as SEG3014F-351. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

No significant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer